

Wood Stork

(*Mycteria americana*)

The **Wood Stork** is listed as an **Endangered** species by the U.S. Fish and Wildlife Service (USFWS) and by the Florida Fish and Wildlife Conservation Commission (FFWCC). The wood stork was listed due to large population declines caused by loss of suitable foraging habitat. **It is illegal to harass, harm, capture, or kill this bird.**



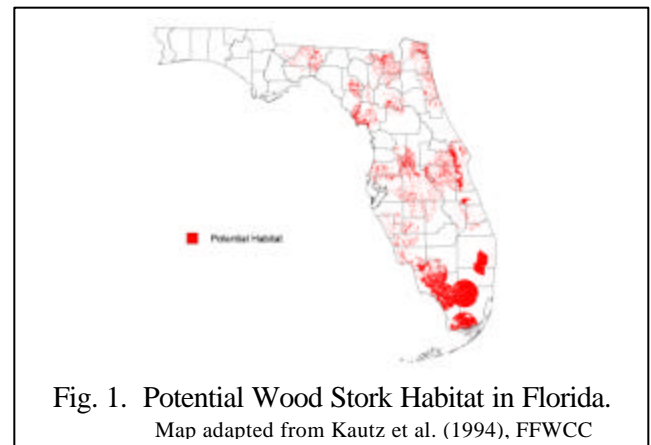
Description

- The adult wood stork is a large, long-legged wading bird, about 3 feet tall and a wing span to 5 feet.
- The plumage of adult birds is white except for black primaries and secondaries and a short black tail. The head and neck lack feathers and are dark gray in color and the legs are black.
- The feet have a pinkish hue, with toes that change to a salmon color during the breeding season.
- The bill is black, thick at the base, and slightly decurved.
- Immature birds (<3 years) have a yellowish bill and varying amounts of gray feathers on the head and neck.

Range

Breeding pairs of wood storks may be found in South Carolina, Georgia, and throughout Florida. Historically, the birds bred in most of the southeastern United States and

Texas. After breeding, the storks move northward as far as Arkansas and Tennessee in the Mississippi Valley and North Carolina on the Atlantic coast. There have been occasional sightings in all States east of the Mississippi River, and sporadic sightings in some States west of the Mississippi and in Ontario. Figure 1 shows potential distributions in Florida.



Historically, greater than 70% of the Southeast's wood stork nesting colonies occurred in south Florida. Many breeding colonies shifted to central and north Florida, due to drainage and other hydrological changes within the Everglades ecosystem. Surveys conducted during the 1990's revealed that only 35% of the total wood stork breeding population still nest in south Florida.

Habitat

Wood storks are birds of fresh and brackish wetlands, primarily nesting in an overstory of cypress, gum, southern willow or pond apple or mangrove swamps. They feed in freshwater marshes, narrow tidal creeks, or flooded tidal pools. Particularly attractive feeding sites are ephemeral water bodies and depressions in marshes or swamps; where fish become concentrated during periods of falling water levels.

The wood stork diet consists of primarily small fish (1 to 10 inches in length) and, occasionally, aquatic invertebrates. Wood storks capture their prey by a specialized technique known as grope-feeding or tacto-location. A stork probes with its bill partly open and when a fish is touched, the bill

is quickly snapped shut. Feeding often occurs in water 2 to 15 inches deep, but optimal feeding occurs in water 4 to 10 inches deep.

The wood stork usually nests in large multispecies waterbird colonies and feeds in flocks. Several nests are usually located within a single tree. Normally 2 to 5 eggs are laid per nest, with an average of one or fewer young fledged per nest where forage opportunities are limited and depredations are frequent. Two to three young fledged per nest can be expected under good conditions.

Management and Protection

The decline of the wood stork is primarily due to the loss of suitable foraging habitat. Wood storks may travel up to 80 miles from nesting to feeding areas and require an estimated 443 pounds of fish during the breeding cycle.

Nesting periods vary historically and geographically. In south Florida, wood storks historically initiated nesting during November - January and young were fledged during February - April. Since the 1970's, in response to changes in hydrology, nest initiation shifted to January - March, with fledging now occurring during April - June. In north and central Florida, storks lay eggs from March - May and young are fledged during June - August. Increased nest failure and nest abandonment are attributed to these reproductive shifts, as foraging conditions decline (i.e., prey becomes less concentrated) after summer rains commence.

Landowners in the range of the wood stork can be directly involved in the protection of this species by following these recommendations and precautions:

- Implement restoration and enhancement of suitable habitat for the mosaic of habitat types used by this species. These habitats include cypress and mangrove swamps, marshes, and ponds. Woody invasive plant species should be eradicated or controlled where possible.
- Adjust water management regimes to consider the needs of the wood stork during appropriate times of the year. For example, optimal water regimes to enhance prey production would involve periods of flooding, preferably during the non-breeding season (i.e., historically and preferably, May - October or, recently, August - December), alternating with drier periods to

concentrate prey during the stork's nesting period.

- Water level management is also crucial at colonies. Standing water, ideally at a depth of three to five feet, is needed in order to reduce nest raiding by terrestrial predators. Periodic drying also may be necessary to prevent trees from dying and to allow recruitment of new trees.
- Create nesting habitat where lacking by establishing artificial nesting structures.
- Prevent human disturbance of colonies by establishing minimum no-entry buffers of 250 feet for colonies surrounded by good protective cover and 400 feet for exposed colonies. Where heavy construction or other significant land use changes occur near a colony, the USFWS recommends no entry buffer zones of > 500 feet and > 1,000 feet for colonies well screened by vegetation and for exposed colonies, respectively.
- Construction of towers or power lines should be placed to avoid wood stork flight patterns to and from colonies.
- Use of chemicals (fertilizers, herbicides, pesticides, etc.) should be restricted where or when their use could adversely impact the wood stork's prey base or nesting success.

The NRCS works with the USFWS and FFWCC to ensure that Federal and State-listed species will not be adversely affected by actions planned by landowners. If you do not contact NRCS, please remember that this is a protected species and, as a minimum, the USFWS and the FFWCC should review your proposed actions. They can be contacted at the following offices:

U.S. Fish and Wildlife Service

(address to be inserted below by District Conservationist)

Florida Fish and Wildlife Conservation Commission (address to be inserted below by District Conservationist)

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